

Decimal Subtraction

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CONCEPT

1

Decimal Subtraction

Here you'll learn how to subtract decimals.

In the last Concept, Julie figured out the sum of the ice cream cone. Can you imagine being in the same situation? Well, that would be a lot of math that you would need to figure out. However, the dilemma didn't stop there. You see, when Julie was figuring out the sum, the customer handed Julie a \$10.00 bill and two quarters.

"I am so glad that I have the change," she said to Julie.

Julie frantically began to work out the math on her piece of paper.

Pay attention in this Concept. To help Julie figure out the correct change, you will need to know how to subtract decimals.

Guidance

In the last Concept, you learned to add decimals. Well, subtracting decimals is very similar to adding them. While the operation is different, the way of working is the same.

To add or subtract decimals, we are going to be working with the wholes and parts of the numbers separately.

We want to add or subtract the parts and then add or subtract the wholes.

How can we do this?

The best way to do this is to keep the parts together and keep the wholes together.

To do this, we simply line up the decimal points in each number that we are adding or subtracting.

$$6.78 - 2.31 = \underline{\hspace{2cm}}$$

First, we line up the problem vertically.

$$\begin{array}{r} 6.78 \\ - 2.31 \\ \hline \end{array}$$

Next, we subtract each digit vertically.

$$\begin{array}{r} 6.78 \\ - 2.31 \\ \hline 4.47 \end{array}$$

Our answer is 4.47.

Sometimes, the values in a subtraction problem can have a different number of digits. We add zeros to help hold places where there are not digits. That way each number has the same number of places.

$$67.89 - 18.4 = \underline{\hspace{2cm}}$$

First, we line up the problem vertically with the decimal point.

$$\begin{array}{r} 67.89 \\ - 18.40 \\ \hline 49.49 \end{array}$$

Our answer is 49.49.

Now it is time for you to try a few on your own. Subtract the following decimals.

Example A

$$16 - 12.22 = \underline{\hspace{2cm}}$$

Solution: 3.78

Example B

$$18.86 - 13.45 = \underline{\hspace{2cm}}$$

Solution: 5.41

Example C

$$19.2 - 13.211 = \underline{\hspace{2cm}}$$

Solution: 5.989

Now let's think about Julie. Do you know how to figure out the customer's change?

The cost of the ice cream cone is \$3.50. Julie took the ten dollar bill and the two quarters from the customer.



$$\begin{array}{r} \$10.50 - 3.50 = \underline{\hspace{2cm}} \\ .50 - .50 = 0 \\ 10 - 3 = 7 \end{array}$$

Julie confidently handed the customer \$7.00 in change. The customer smiled, thanked Julie and left eating her delicious ice cream cone.

Vocabulary

Here are the vocabulary words in this Concept.

Sum the answer in an addition problem.

Difference the answer in a subtraction problem.

Guided Practice

Here is one for you to try on your own.

$$34.08 - 12.99 = \underline{\hspace{2cm}}$$

Answer

To begin, we line up the digits according to place value and subtract.

Our answer is 21.09.

Interactive Practice

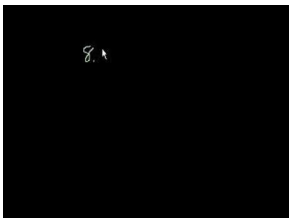


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Video Review

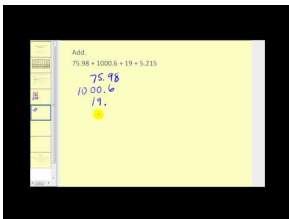
Here are videos for review.



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[KhanAcademySubtractingDecimals](#)



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[James Sousa, Adding and Subtracting Decimals](#)

Practice

Directions: Subtract the following decimals.

1. $17.65 - 4 = \underline{\hspace{2cm}}$
2. $18.97 - 3.4 = \underline{\hspace{2cm}}$
3. $22.50 - .78 = \underline{\hspace{2cm}}$
4. $27.99 - 1.99 = \underline{\hspace{2cm}}$
5. $33.11 - 3.4 = \underline{\hspace{2cm}}$
6. $44.59 - 11.34 = \underline{\hspace{2cm}}$
7. $78.89 - 5 = \underline{\hspace{2cm}}$
8. $222.56 - 11.2 = \underline{\hspace{2cm}}$
9. $567.09 - 23.4 = \underline{\hspace{2cm}}$
10. $657.80 - 3.04 = \underline{\hspace{2cm}}$
11. $345.01 - 123.90 = \underline{\hspace{2cm}}$
12. $567.08 - 111.89 = \underline{\hspace{2cm}}$
13. $378.99 - 345.12 = \underline{\hspace{2cm}}$
14. $786.01 - 123.10 = \underline{\hspace{2cm}}$
15. $504.32 - 345.89 = \underline{\hspace{2cm}}$